

### STATE OF TENNESSEE

## Department of Commerce and Insurance BOARD OF EXAMINERS FOR LAND SURVEYORS 500 James Robertson Parkway, 3rd Floor Nashville, TN 37243-1146 615-741-3611

Fax: 615-532-9410

www.state.tn.us/commerce/boards/surveyors/index

**TO:** All Tennessee Land Surveyor Applicants

**FROM:** Tennessee Board of Examiners for Land Surveyors

**RE:** TCA 62-18-109

Category A, B, C Educational Courses

In order to assist applicants with the process of obtaining the educational surveying requirements toward the application process for the state of Tennessee, the attached pre-approved lists are offered for your convenience.

This list is preliminary and will be under continuous revision as the Board receives appropriate information. The Administrative Director of the Board and the Department website personnel will be responsible for the website update. Our website address is: <a href="https://www.state.tn.us/commerce/boards/surveyors/index.html">www.state.tn.us/commerce/boards/surveyors/index.html</a>.

If an individual is applying for licensure and has already obtained their four year baccalaureate degree in Land Surveying (*Category A*), then the individual will have already taken all required courses and the attached listings will not apply to them.

An individual applying under *Category B* will be required to submit 24 semester hours of courses relating directly to surveying. Acceptable courses may have been taken while pursuing your four year degree or you may need to select courses from List I or II. A minimum of 18 hours must be equivalent to courses shown in List I and the remainder from List II or III.

An individual applying under *Category C* will be required to submit 36 hours of courses relating directly to surveying. Acceptable courses may have been taken while pursuing your four year degree or you may need to select a total of 36 hours from List I, II, or III. A minimum of 18 hours must be equivalent to courses shown in List I, six hours from List II and the remaining 12 hours from List I, II or III.

An additional list attached are the institutions where the board has pre-approved courses relating to surveying: East Tennessee State University, Johnson City, TN; Pellissippi State Community College, Knoxville, TN; Austin Peay State University, Clarksville, TN; Columbia State Community College, Columbia, TN; University of Tennessee – Martin, Martin, TN; University of Memphis, Memphis, TN; Murray State University, Murray, KY; Nashville State Community College, Nashville, TN; Jackson State Community College, Jackson, TN; Southwest Tennessee Community College, Jackson, TN; Chattanooga State Community College, Chattanooga, TN; Louisiana Technical College.

## SURVEYING AND GEOMETRICS THIS LIST IS SUBJECT TO CHANGE

Therefore, you should keep this list and return it with your application.

(Revised June 16, 2008)

UNLESS THE COURSE THAT YOU ARE REQUESTING CREDIT FOR IS SPECIFICALLY RELATED TO SURVEYING. YOU WILL ONLY RECEIVE CREDIT ONE TIME. YOU WILL NOT RECEIVE CREDIT FOR EVERY TIME YOU TAKE THE SAME COURSE, FOR EXAMPLE, IF YOU ARE GIVEN CREDIT FOR CALCULUS I, YOU WILL NOT RECEIVE CREDIT FOR CALCULUS II, III OR ANY OTHER CALCULUS COURSE.

#### **(I)** A Minimum of 18 Hours\*

Advanced Surveying Principles

Control Surveys

Land Boundary/Real Estate Law

Land Subdivision and Mapping/Platting

Positioning with GPS Land Survey Systems

Survey Measurement and Analysis

Survey Projects

Hydrographic Surveying

Mine Surveying

Map Projections and State Planes

Geodetic Science

Cartography III or above

Surveying and Lab (Level 300 or above)

Site Planning & Development

Road Design/Route Survey

Legal Aspects of Surveying

Precision Tech Ag&NRM GIS/GPS Advance GIS (Level 300 or Above)

Advanced Surveying Math

**Production Monitoring and Automation Boundary Control & Legal Principles** 

for Surveyors

Surveying & GIS GIS & GPS Application to Biosystems

Quantitative Methods in Geography Surveying Natl Resources w/GPS

\*The Board recommends that these courses be 300 and 400 level courses.

#### (II) A Minimum of 6 Hours

Digital Image & Base Maps

Automated Surveying & Mapping (CAD)

Hydrology

Photogrammetry

Surveying Measurement Fundamentals/Principles

**Engineering and Construction Surveys** 

Construction Surveys

Field Mapping

Surveying I and II

Cartography I and II

Hydraulics and Water Systems

Dendrology

Remote Sensing

Advanced AutoCAD & Civil Drawing

Surveying and Soil & Water Engineering Transportation/Highway Engineering **Environmental Instrumentation &** 

Monitoring

CAD Applications to Biosystems

**Engineering Technology** 

Geomatics

Environmental Instrumentation and

Monitorina

Applications to Biosystems Engr. Tech

(III) Computer Programming

Surveying Graphics

**Technical Communication** 

Soil and Water Engineering/Earth Science

Professional Ethics

Resource Management/GIS

**Statistics** 

Trigonometry

Calculus

Geometry

**Physics** 

**Engineering CAD Drawing** Geology for Engineers

# PRE-APPROVED EDUCATION HOURS FOR APPLICATION

THIS LIST IS SUBJECT TO CHANGE

SUBJECT/COURSE/COURSE TITLE	LIST	HOURS	INSTITUTION
SUBJECT/COURSE/COURSE TITLE	LIST	HOUKS	INSTITUTION
SURV 2038 Honors Professional Ethics	III	3	East Tennessee State University
SURV 2550 Surveying Measurement			
Fundamentals		4	East Tennessee State University
SURV 2560 Surveying Graphics	Ш	4	East Tennessee State University
SURV 3030 Technical Communications	Ш	3	East Tennessee State University
SURV 3048 Honor Methods of Research		3	East Tennessee State University
SURV 3510 Engineering and Construction			
Surveys	II	4	East Tennessee State University
SURV 3520 Land Survey Systems	I	2	East Tennessee State University
SURV 3530 Survey Measurement and			
Computational Analysis	I	4	East Tennessee State University
SURV 3540 Surveying Projects	I	3	East Tennessee State University
SURV 3550 Advanced Surveying Mathematics			
		3	East Tennessee State University
SURV 3560 Geodetic Science	I	4	East Tennessee State University
SURV 4517/5517 Photogrammetry	II	4	East Tennessee State University
SURV 4520 Survey Science Topics		3	East Tennessee State University
SURV 4537/5537 Land Boundary Location	İ	4	East Tennessee State University
SURV4547/5547 Land Subdivision and			
Platting	I	4	East Tennessee State University
SURV 4550 Automated Surveying and Mapping	II	3	East Tennessee State University
SURV 4567/5567 Positioning with GPS	I	3	East Tennessee State University
SURV 4617/5617 Digital Imagery Processing	II	3	East Tennessee State University
AGET 220 Surveying and Soil & Water			
Engineering	П	3	University of Tennessee @ Martin
AGET 482 Precision Tech Ag&NRM GIS/GPS	i i	3	University of Tennessee @ Martin
AGET/CIEG 354 Advanced Land Surveying &	•		Chiverenty of Fermioecco & Martin
Geomatics	ı	3	University of Tennessee @ Martin
AGET/CIEG 454 Land Surveying with GPS	<u> </u>	3	University of Tennessee @ Martin
AGET/CIEG 456 Boundary Control & Legal	•		Chiverenty of Fermioecco & Martin
Principles	1	3	University of Tennessee @ Martin
AGET/CIEG 458 Subdivision Site Planning &	· · · · · · · · · · · · · · · · · · ·		Conversity or reminesce Containing
Development	ı	3	University of Tennessee @ Martin
CSCI 211 Introduction to Computer	· · · · · · · · · · · · · · · · · · ·		Conversity of Fermioseco C martin
Programming	III	3	University of Tennessee @ Martin
CSCI 230 FORTRAN Programming	III	3	University of Tennessee @ Martin
CSCI 231 Computer Programming for Engineers	III	3	University of Tennessee @ Martin
ENGR 101 Engineering Graphics	III	3	University of Tennessee @ Martin
ENGR 311 Engineering Applications of			CGrony or reminesses & Martin
Probability and Statistics	III	3	University of Tennessee @ Martin
ENGR 350 Prin of Land Surveying and	I	3	University of Tennessee @ Martin
Geomatics	•		Cvoloky of Tollilosoco & Martill
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ENGR 352 Transportation Engineering	i	3	University of Tennessee @ Martin
ENGR 353 Hydraulics and Hydrology	<u>.</u> 	3	University of Tennessee @ Martin
ENGR 409 Project Management	<u></u>	2	University of Tennessee @ Martin
ENGR 490 Special Topics – Surveying Projects		3	University of Tennessee @ Martin
GEOG 201 Introduction to Physical Geography	<u>'</u> 	3	University of Tennessee @ Martin
GEOG 310 Principles of GIS	1111	3	University of Tennessee @ Martin
GEOG 364 Introduction to Remote Sensing	<u>'</u> 	3	University of Tennessee @ Martin
GLOG 304 Introduction to Remote Sensing		3	Offiversity of Termessee & Martin
GEOG 410 Geographic Information Systems: Modeling & Application	II	3	University of Tennessee @ Martin
GEOG 471 Cartography	l	3	University of Tennessee @ Martin
MATH 140 College Algebra and Functions	Ш	3	University of Tennessee @ Martin
MATH 160 Calculus for Business and Life			
Science		3	University of Tennessee @ Martin
MATH 210 Elementary Statistics and Probability		3	University of Tennessee @ Martin
MATH 251 Calculus I		4	University of Tennessee @ Martin
MATH 252 Calculus II	Ш	4	University of Tennessee @ Martin
MATH 320 Multivariate Calculus	Ш	4	University of Tennessee @ Martin
PLSC 341 Dendrology & Forest Ecology	П	3	University of Tennessee @ Martin
PHIL 160 Introduction to Ethics	III	3	University of Tennessee @ Martin
PHSY 211 College Physics		4	University of Tennessee @ Martin
PHSY 212 College Physics	III	4	University of Tennessee @ Martin
PHSY 220 University Physics		4	University of Tennessee @ Martin
PHSY 221 University Physics	III	4	University of Tennessee @ Martin
PHSY 322 University Physics	III	3	University of Tennessee @ Martin
PHSY 323 University Physics		3	University of Tennessee @ Martin
SOIL 210 Soil Science	II	4	University of Tennessee @ Martin
IET 101-02 Intro to CAD		3	Jackson State Community College
GSC 305 Map Analysis		3	Murray State University
GSC 522 Cartography II		3	Murray State University
CET 370 Intermediate Surveying	<u>''</u>	3	Murray State University
IET 571 Problems in Industrial and Engineer			Warray State Striversity
Technology		3	Murray State University
ET 486 Boundary Surveying II		3	Murray State University
IET 380 Professional Internship		3	Murray State University
ENG 352 Transportation Engineering		3	Murray State University
CCET 1010101 Surveying I and Lab	II	4	Southwest Tennessee Community College
MATH 1740101 Algebra and Trig I	III	3	Southwest Tennessee Community College
MEET 1210101 CAD Design I and Lab		4	Southwest Tennessee Community College
CCET 1134151 Civil Drafting and Lab		4	Southwest Tennessee Community College
CCET 2020151 Surveying II and Lab	II	4	Southwest Tennessee Community College
GEOG 1101 Intro Forth SC W/C		1	Liniversity of Memobie
GEOG 1101 Intro Earth SC W/C	III	3	University of Memphis
MATH 1211 College Algebra		3	University of Memphis
MATH 1312 Elementary Calculus	III	3	University of Memphis
MAT 113 College Trigonometry	III	3	Columbia State Community College

EDC 101 Engineering Craphics		2	Columbia State Community Callers
ERG 101 Engineering Graphics	111	3	Columbia State Community College
PHY 211 Physics I	III	4	Columbia State Community College
PHY 255 Engineering Statistics	III	3	Columbia State Community College
PHY 212 Physics II		4	Columbia State Community College
CEE 2020 Commenter		2	Tana assas Tasha alanias Haiyaraity
CEE 3020 Surveying	1	3	Tennessee Technological University
GEOL 3210 Geology for Engineers	III	3	Tennessee Technological University
CEE 4920 Professionalism and Ethics	III	1	Tennessee Technological University
IME 3100 Engineering Economy	III	3	Tennessee Technological University
CEE4640 Highway Engineering	111	3	Tennessee Technological University
ISE 3200 Engineering Statistics	III	3	Tennessee Technological University
ENGR 1110 Engineering Graphics	III	2	Tennessee Technological University
ENGR 1210 Intro to Engineering	III	1	Tennessee Technological University
MATH 1910 Calculus I	III	5	Tennessee Technological University
CEE 3420 Hydraulics	II	3	Tennessee Technological University
CEE 4420 Engineering Hydrology	II	3	Tennessee Technological University
AGHT 3450 Dendrology	ll l	3	Tennessee Technological University
GEOG 4210 Cartography	l	3	Tennessee Technological University
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MATH 1720-23 Trigonometry	III	3	Austin Peay State University
GEOG 3920 Field Mapping and the Global			
Positioning System		3	Austin Peay State University
GEOG 3250 Geographic Information Systems		3	Austin Peay State University
GEOG 4160 Modeling Dynamic Systems and			
GIS		?	Austin Peay State University
GEOG 4270 Watershed Management		4	Austin Peay State University
PHYS 2010 College Physics	III	5	Austin Peay State University
GEOG 1010 Physical Geography	III	3	Austin Peay State University
GEOG 3150 Maps and Their Interpretation		3	Austin Peay State University
MATIL 4040 404 Octobre and Anal Coars		4	Next 20 Octobro 20 Octobro 20 Octobro
MATH 1910-101 Calculus and Anal Geom		4	Nashville State Community College
PHYS 2010-103 Non-Calc Based Physics		4	Nashville State Community College
CAD 1200-100 Computed Aided Drafting		3	Nashville State Community College
CIT 2131 Surveying I		4	Nashville State Community College
CIT 2311 Surveying II	II	4	Nashville State Community College
CIT 2301 Hydrology and Site Design		3	Nashville State Community College
CIT 2200 Hydraulics & Water Systems		4	Nashville State Community College
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CIVL 1110 Civil Math I		3	Louisiana Technical College
CIVL 1120 Surveying I Lecture	ll "	3	Louisiana Technical College
CIVL 1121 Surveying I Lab	II	1	Louisiana Technical College
CIVL 1210 Civil Math II		3	Louisiana Technical College
CIVL 1220 Surveying II Lecture		3	Louisiana Technical College
CIVL 1221 Surveying II Lab	II	1	Louisiana Technical College
CIVL 1320 Surveying III Lecture		3	Louisiana Technical College
CIVL 1321 Surveying III Lab		1	Louisiana Technical College
CIVL 1340 Soil Mechanics Lecture		2	Louisiana Technical College
CIVL 1341 Soil Mechanics Lab		1	Louisiana Technical College
CIVL 1410 Surveying IV Lecture		2	Louisiana Technical College
CIVL 1411 Surveying IV Lab		1	Louisiana Technical College

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CIVL 1420 Map Study		2	Louisiana Technical College
CIVL 1430 Legal Principles of Surveying		3	Louisiana Technical College
CIVL 1441 Computer Aided Drafting		2	Louisiana Technical College
CIVL 2511 Surveying Technical Practice I		2	Louisiana Technical College
CPTR 1000 Introduction to Computers		2	Louisiana Technical College
CIVL 2530 Applied Surveying Mathematics		3	Louisiana Technical College
CIVL 2551 Computer Software			
(Surveying Applications)		2	Louisiana Technical College
CIVL 2611 Surveying Technical Practice II		2	Louisiana Technical College
CIVL 2620 U.S. Public Land Surveys		3	Louisiana Technical College
CIVL 2630 Highway Plan Reading		2	Louisiana Technical College
SPCH 1015 Introduction to Public Speaking		3	Louisiana Technical College
CIVL 2991 Special Projects I			
(Surveying Only)		1	Louisiana Technical College
CIVL 2993 Special Projects II			
(Surveying Only)		2	Louisiana Technical College
CIVL 2995 Special Projects III			
(Surveying Only)		3	Louisiana Technical College
CIVL 2996 Special Projects IV			
(Surveying Only)		3	Louisiana Technical College
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BsET 412 Surveying	ı	3	University of Tennessee@Knoxville
BsET 326 GIS/GPS Applications in Agriculture	-		
And Environmental Science	1	3	University of Tennessee@Knoxville
BsET 434 Production Monitoring and Automation	l	3	University of Tennessee@Knoxville
CE 351 Transportation Engineering I	l	3	University of Tennessee@Knoxville
CE 352 Transportation Engineering II	I	3	University of Tennessee@Knoxville
GEOG 310 Introduction to Cartography	i	3	University of Tennessee@Knoxville
GEOG 412 Advances Cartography Techniques	i	3	University of Tennessee@Knoxville
BsET 414 CAD Applications to Biosystems	•	0	Offiversity of Termessee (CitioxVIII)
Engineering Technology	II	3	University of Tennessee@Knoxville
BsET 474 Environmental Instrumentation and	••		Offiversity of Termessee & Mickellie
Monitoring	II	3	University of Tennessee@Knoxville
CE 210 Geomatics	l II	4	University of Tennessee@Knoxville
Communication Studies 240	III	3	University of Tennessee@Knoxville
Math 151-152	III	6	University of Tennessee@Knoxville
	III	4	University of Tennessee@Knoxville
Physics 221 Statistics201	III	3	,
			University of Tennessee@Knoxville
ESS 301 Profession Development	III	1	University of Tennessee@Knoxville
ESS 324 Soil and Water Conservation	III	3	University of Tennessee@Knoxville
BsET 534 Production Monitoring & Automation	l	3	University of Tennessee@Knoxville
BsE 480 Boundary Control & Legal Principles		3	University of Tennessee@Knoxville
For Surveyors			Hairmait, of Tanana GV "
BsE 562 Surveying & GIS		3	University of Tennessee@Knoxville
BsE/BsET 555 GIS & GPS Application to		3	University of Tennessee@Knoxville
Biosystems			

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GEO 415 Quantitative Methods in Geography	l	3	UNIVERSITY OF TENNESSEE@KNOXVILLE
BsE/BsET 562 Surveying Natl Resources w/GPS	I	3	University of Tennessee@Knoxville
BsET 574 Environmental Instrumentation & Monitoring	II	3	University of Tennessee@Knoxville
BsET 514 CAD Applications to Biosystems Engr Tech	II	3	University of Tennessee@Knoxville
BsET 503 Seminar	III	3	University of Tennessee@Knoxville